

What Is Claimed Is:

1. A fuel injector (1) for fuel-injection systems of internal combustion engines, having a solenoid coil (10), a tubular support (8) acting as inner pole of the solenoid coil (10), and a filter element (19), wherein the filter element (19) is affixed at an outer contour (28) of the tubular support (8) of the fuel injector (1).
2. The fuel injector as recited in Claim 1, wherein the outer contour (28) of the tubular support (8) has grooves (27).
3. The fuel injector as recited in Claim 2, wherein the grooves (27) are introduced into the tubular support (8) by machine-cutting or with the aid of a form steel.
4. The fuel injector as recited in one of the Claims 1 through 3, wherein the tubular support (8) has a shoulder (29) on the discharge-side of the grooves (27).
5. The fuel injector as recited in Claim 4, wherein the filter element (19) rests against the shoulder (29).
6. The fuel injector as recited in one of the Claims 1 through 5, wherein a press-fit between the filter element (19) and the tubular support (8) is achieved by installation of an extension sleeve (30), which has an inner diameter that is slightly smaller than an outer diameter of the filter element (19).

7. The fuel injector as recited in one of the Claims 1 through 6,

wherein the filter element (19) is made up of a cup-shaped filter (21) made of a cloth material (24) and a glass fiber plastic extrusion coat (25).

8. A method for installing a fuel injector (1) for fuel-injection systems of internal combustion engines, having a solenoid coil (10), a tubular support (8) acting as inner pole of the solenoid coil (10), and a filter element (19), the filter element (19) being affixed at an outer contour (26) of the tubular support (8) of the fuel injector (1), the method comprising the following method steps:

- Production of a cup-shaped filter (21) made from a cloth material (24);
- Extrusion-coating of the filter (21) with a glass fiber plastic extrusion coat (25);
- Introduction of grooves (27) in the outer contour (28) of the tubular support (8) of the fuel injector (1);
- Slipping the filter element (19) onto the outer contour (28) of the tubular support (8);
- Mounting of an extension sleeve (30) whose inner diameter is slightly smaller than an outer diameter of the filter element (19); and
- Compression of the glass fiber plastic extrusion coat (25) of the filter element (19) with the grooves (27) of the outer contour (28) of the tubular support (8) by the installation pressure of the extension sleeve (30).